

## **Title: A Day to Remember!!**

### **Brief Overview:**

This is a series of five activities involving money and time that are designed to be used at the end of a money unit or a unit on estimation. The culmination of the lessons is a task that requires the student to integrate both time and money into an enjoyable, real-life situation.

### **Link to Standards:**

- **Problem Solving** Students will demonstrate their ability to solve mathematical problems, including problems with open-ended answers and with real-life applications in a cooperative atmosphere.
- **Reasoning** Students will demonstrate the ability to reason mathematically and justify their reasoning with examples.
- **Number and Number Relationships** Students will interpret the multiple uses of numbers encountered in the real-world.
- **Number Systems and Number Theory** Students will use money to show how the basic arithmetic operations are related to each other.
- **Computation and Estimation** Students will estimate, compute with whole numbers, and then use estimation to check the reasonableness of results.
- **Patterns and Functions** Students will analyze functional relationships and explain how a change in one quantity results in a change in another. They also will find patterns and similarities in schedules.
- **Statistics** Students will learn construct, read, and interpret displays of data.
- **Measurement** Students will make and use estimates of measurement, both with time and money.

### **Grade/Level:**

Grades 4-8

**Duration/Length:**

These activities would take approximately 4 to 5 days. Duration depends on the instructional level of the learners and the modifications made by the instructor.

**Prerequisite Knowledge:**

Students should have working knowledge of the following skills:

- Determining the names and value of coins and paper money
- Counting money and making change
- Adding and subtracting
- Interpreting and using information from graphs and tables
- Organizing data
- Estimating and making approximate calculations
- Applying mathematical decision-making skills to personal issues
- Describing the data needed for making a decision
- Using mathematical concepts and problem solving strategies in pursuit of leisure activities

**Objectives:**

Students will:

- work cooperatively in groups.
- organize data from resources.
- estimate approximate times and expenses.
- write an explanatory letter, justifying their choices

**Materials/Resources/Printed Materials:**

- Pencils
- Calculator
- Money (coin and paper)
- Clocks
- Samples of at least 4 different schedules, on overheads
- Student Resource Sheets # 1-6

## **Development/Procedures:**

**Activity 1:** Review coins and paper money.

- Give each set of two students a “Money Jar” containing approximately \$2.50 in coins.
- Have the students sort the coins, identify them and identify the value of each denomination. Then have the students display several given amounts of money.
- Have the students practice paying for items and making change by playing a Money Game (see References for suggested games).

**Activity 2:** Introduce the students to schedules

- Display, on the overhead, a (grid) TV schedule from the TV Guide or your local newspaper. Have the students use the grid to find answers to questions such as, “What show is on channel 9 at 8:00 p.m.?” and “What time can you watch *Scooby-Do* on channel 42?”
- Display several other schedules (classroom, bus, airline, weekend, evening, etc.) on the overhead, one at a time, and ask the students the same types of questions.
- Have the students compare and contrast the schedules. Ask them to find some similarities--patterns--that they all share. (If the students do NOT realize that they all allow some time in between classes, flights, etc., help them to arrive at this discovery. They will need to consider that fact when they create their own schedule.)

**Activity 3:** Introduce the task to the students.

- Distribute copies of the task (Student Worksheet #1) to the students. Have them read it silently.
- Discuss the task with the students. Verify that they understand what is required of them.
- Let them brainstorm (in their groups) some of the things they might like to do with their cousin on that day. Have one student from each group report the results from their group, to help other students who may be having a difficult time coming up with ideas.
- Display a copy of Student Resource #2 on the overhead or on a large chart. Discuss the information with the students so that they will have an understanding of how to use this sheet in the next activity.

**Activity 4: Planning and Estimating**

- Distribute a copy of Student Resource Sheets #2 and #3 to each group. Verify that the students understand why they are receiving these sheets, and how to refer to them.
- Distribute a copy of Student Worksheet #2 and Student Worksheet #3 to each group of students. Make sure that the students understand the directions.
- Monitor the students' progress by moving from group to group, and provide guidance where necessary.

**Activity 5: Letter Writing**

- Briefly review the parts of an explanatory letter with the students.
- Distribute a copy of Student Worksheet #1 to each student. Make sure that the students understand the directions.
- While the students are writing their letters, provide guidance and suggestions when necessary.

**Performance Assessment:**

Students will be evaluated based on the following criteria (rubrics for these evaluations can be found on the Teacher Resource pages):

- Group participation and performance--students will need to be monitored daily for group participation and on-task performance.
- Concept attainment--students estimations of time will need to be realistic, and their anticipated expenditures must not exceed their allotment.
- Attention to form, audience, topic, and purpose in their explanatory letter

**Extension/Follow Up:**

- Students could be involved in the scheduling of sports and school related activities.

## References

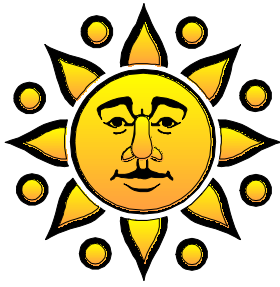
Suggested Games: Grocery Cart, Shopping Bag, Menu Math (all Creative Teaching Associates games) and others, available in catalogs from the following companies:  
School Specialty; 9645 Gerwig Lane; Columbia, MD 21046-1503  
Kurtz Bros.; 400 Reed St.; P.O. Box 392; Clearfield, PA 16830-0392

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Your favorite cousin is coming to spend a week with you this summer. While your parents have planned out most of the week for you, they have given you the task of planning your last full day together. It is up to you to decide where you want to go, and how you will spend the day.

There are some limitations, though. First, each of you will only have \$25 dollars to spend that day. Second, your cousin is an avid baseball fan, and can't wait to go to his first Shorebirds game. You are excited about this, too, but the only home game they will be playing while he is here is the evening of that very day. (One good thing, though, is that your mom told you she would pay both of your tickets to the ball park if you decided to go to the game!!)

Your cousin is anxiously awaiting your letter explaining your plans for the week--but, most of all, the plans you have made for his last day of vacation.



## Local Activities

Ward Museum .....	\$3.00 per person
Movies -	
At the Centre .....	\$4.25 per person
At Movies 6 .....	\$2.25 per person
Popcorn .....	\$2.50 / \$3.25 / \$3.75
Soda .....	\$2.25 / \$2.75 / \$3.50
Candy Bars .....	\$1.50 each
Jolly Roger Amusement Park .....	\$12.00 per person
Mini-Golf (Ocean City) .....	\$4.95 per person
Video Games at the Centre .....	50¢ per game
Driving Range .....	\$5.00 per bucket of golf balls
Ocean City Beach .....	Free
Salisbury Zoo .....	Free
Volleyball .....	Free
Tennis .....	Free
Biking .....	Free
Roller Blading .....	Free

## Some Prices at the Arthur W. Perdue Stadium

Soda	- small	.....	\$1.50
	- large	.....	\$2.00
Nachos	.....		\$3.00
Hot Dog	.....		\$2.50
Hamburger	.....		\$2.75
Cheeseburger	.....		\$3.00
Cotton Candy	.....		\$2.00
Peanuts	.....		\$2.00
Ice Cream	.....		\$2.00
Program	.....		\$6.00
Souvenirs	.....	various prices from \$3.00 to \$15.00	



Your cousin from out of town is coming to visit you. You have planned some fun activities to do while your cousin is here. Write a letter to your cousin explaining the activities that you have planned.

Follow the writing process as you write your letter. Get your ideas down on a graphic organizer, paying attention to topic, form, audience, and the purpose of your letter. Write your rough draft. Revise and look for spelling, capitalization and punctuation corrections. Make sure that your final draft is in a letter format.

[illegible]

Name\_\_\_\_\_

Date\_\_\_\_\_

**A Day to Remember!!**

Use this blank schedule to plan your day. Don't forget 'travel time' and 'down time' when you are planning.

<b>Time</b>	<b>What will you be doing???</b>
7:00 - 8:00	
8:00 - 9:00	
9:00 - 10:00	
10:00 - 11:00	
11:00 - 12:00	
12:00 - 1:00	
1:00 - 2:00	
2:00 - 3:00	
3:00 - 4:00	
4:00 - 5:00	
5:00 - 6:00	
6:00 - 7:00	
7:00 - 8:00	
8:00 - 9:00	
9:00 - 10:00	
10:00 - 11:00	

Name\_\_\_\_\_

Date\_\_\_\_\_

Student Worksheet #3

## A Day to Remember!!

Use this form to list what you think you'll spend that day. Be sure to stay under \$25.00.

Morning

Where?	On what?	How much did you spend?

Morning

Subtotal \_\_\_\_\_

Afternoon


Afternoon

Subtotal \_\_\_\_\_

Evening


Evening

Subtotal \_\_\_\_\_

**Grand Total** \_\_\_\_\_

## Scoring Rubrics

### Part 1 - Group Participation

(To be used only on the days the students work in groups.)

**Each member of the group earns 3 points if:**

- Each person does his/her job.
- The group completes the task.
- Appropriate behavior is displayed.
- Work is very neat.
- All group members will be able to report completely on the results of the day's efforts.

**Each member of the group earns 2 points if:**

- Each student does his/her job with little redirection.
- The group completes the task.
- Appropriate behavior is displayed.
- Work is neat.
- All group members will be able to report on the results of the day's efforts with little prompting.

**Each member of the group earns 1 point if:**

- Each person does his/her job, but only with redirection.
- The task is not yet complete, but progress is being made.
- Acceptable behavior is displayed.
- Work is legible.
- At least half of the group members will be able to report on the results of the day's efforts with little prompting.

**Each member of the group earns 0 points if:**

- The group is frequently off task.
- The task is not completed.
- There are some minor behavior problems.
- Work is not legible.
- Less than half of the group's members will be able to report on the results of the day's efforts.

## Part 2 - The Schedule

- 4 points: The proposed time schedule is realistic and manageable.  
Information is presented with clarity.
- 3 points: The proposed time schedule is adequately developed  
Some of the information presented is unclear.
- 2 points: The proposed time schedule is not realistic.  
*or*  
Most of the information presented is unclear.
- 1 point: The proposed time schedule is not realistic.  
*and*  
Most of the information presented is unclear.
- 0 points: No attempt is made.

## Part 3 - Estimated Expenditures

- 4 points: Expenditures did not exceed monies allotted for the day's activities.  
Expenditures are accurately entered.  
Totals and subtotals are computed correctly.
- 3 points: Expenditures did not exceed monies allotted for the day's activities.  
Expenditures are entered with no more than one (1) error.  
Totals and subtotals are computed correctly.
- 2 points: Expenditures selected exceeded monies allotted for the day's activities.  
*or*  
Expenditures entered have more than one (1) error.  
*or*  
Totals or subtotals are computed incorrectly.
- 1 point: Expenditures selected exceeded monies allotted for the day's activities.  
*and*  
Expenditures entered have more than one (1) error.  
*and*  
Totals or subtotals are computed incorrectly.
- 0 points: No attempt made.

## Part 4 - The Letter

- 4 points:      -uses the correct letter format (five parts).  
                    -shows audience awareness.  
                    -maintains topic focus throughout the letter.  
                    -maintains organization throughout the letter.  
                    -develops paragraphs fully.  
                    -indent paragraphs.  
                    -uses correct spelling, grammar, and mechanics.
- 3 points:      -uses the correct letter format (five parts).  
                    -shows audience awareness.  
                    -maintains topic focus throughout the letter.  
                    -maintains organization throughout the letter, but has minor flaws.  
                    -fully develops paragraphs.  
                    -indent paragraphs.  
                    -generally uses correct spelling, grammar, and mechanics.
- 2 points:      -uses correct explanatory letter form.  
                    -shows some awareness of audience.  
                    -minimally maintains organization.  
                    -does not provide enough detail to develop paragraphs.  
                    -indent paragraphs.  
                    -generally uses correct spelling, grammar, and mechanics.
- 1 point:      -has omitted parts of an explanatory letter.  
                    -shows little awareness of the audience.  
                    -does not focus on the topic.  
                    -does not maintain organization.  
                    -does not provide enough detail to develop paragraphs.  
                    -does not indent paragraphs.  
                    -numerous errors in spelling, grammar, or mechanics.
- 0 points:      -no attempt made.